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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,485	10/27/2005	Hideaki Mita	YAMAP0978US	4034
51921	7590	11/01/2007	EXAMINER	
MARK D. SARALINO (MEI) RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE 19TH FLOOR CLEVELAND, OH 44115			FARROKH, HASHEM	
		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,485	MITA ET AL.	
	Examiner	Art Unit	
	Hashem Farrokh	2187	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 October 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,2,13 and 14 is/are rejected.
 7) Claim(s) 3-12 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 29 April 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 4/29/05, 3/1/07.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

The instant application having application No. 10/533,465 has a total of 14 claims pending in the application; there are 2 independent claims and 12 dependent claims, all of which are ready for examination by the examiner.

INFORMATION CONCERNING IDS:

The information disclosure statement filed 03/01/07 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

An English translation of the Japanese Office Action listed under other arts in the IDS had not been provided therefore the Examiner did not consider the reference.

INFORMATION CONCERNING CLAIMS:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2001/0044878 A1 to Ando et al. (hereinafter Ando).

1. *In regard to claim 1 Ando teaches:*

"A recording method for recording data into an information recording medium, wherein the number of data rewrites into the same area is limited, the recording method comprising the steps of:" (e.g., see Paragraph 439).

"(a) performing a search for unallocated areas in an information recording area and retaining, in a memory (e.g., see Paragraph 616; Unallocated Space Table 452 in Figs. 14-15), unallocated area identifying information for identifying at least one unallocated area found by the search;" (e.g., see Paragraph 27 and 1022-1023).

"(b) determining whether or not an unallocated area satisfying a record request is present among the at least one unallocated areas identified by the unallocated area identifying information;" (e.g., see Paragraph 1024). *Ando teaches that unallocated or unused area are searched provided that there is at least one unallocated area large enough for the preset size of recording data and the bit map descriptor is updated.*

Therefore, the search inherently requires a determination as to whether the unallocated area is large enough (e.g., satisfies) a preset size for recording data.

"and (c) when an unallocated area satisfying a record request is present among the at least one unallocated areas identified by the unallocated area identifying information (e.g., see Paragraph 1024, allocating the unallocated area as an area for recording data and recording data into the allocated area." (e.g., see Paragraph 503; Figs. 17-18). *For example Figs 17 and 18 show information description structures that identifies allocated areas or extents related to file system.*

2. *In regard to claim 13 Ando teaches:*

"A recording apparatus for recording data into an information recording medium, wherein the number of data rewrites into the same area is limited, the recording apparatus comprising:" (**e.g., see paragraph 3**).

"a holding section for performing a search for unallocated areas in an information recording area and retaining, in a memory (**e.g., see Paragraph 616; Unallocated Space Table 452 in Figs. 14-15**), unallocated area identifying information for identifying at least one unallocated area found by the search;" (**e.g., see Paragraph 27 and 1022-1023**).

"a determining section for determining whether or not an unallocated area satisfying a record request is present among the at least one unallocated areas identified by the unallocated area identifying information;" (**e.g., see Paragraph 1024**).

"and a recording section for (**e.g., paragraphs 616-617**), when an unallocated area satisfying a record request is present among the at least one unallocated areas identified by the unallocated area identifying information (**e.g., see Paragraph 1024**), allocating the unallocated area as an area for recording data and recording data into the allocated area." (**e.g., see Paragraph 503; Figs. 17-18**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando in view of U.S. Patent Publication No. 2001/0021965 to Yokota et al. (hereinafter Yokota).

3. *In regard to claim 2 Ando teaches all limitations recited in claim 1 but does not expressly teach: "(d) when an unallocated area satisfying a record request is not present among the at least one unallocated areas identified by the unallocated area identifying information, returning to step (a)."*

Yokota teaches: "(d) when an unallocated area satisfying a record request is not present among the at least one unallocated areas identified by the unallocated area identifying information, returning to step (a)." (e.g., see Paragraph 472; Fig.29) for repeating the search for free or unallocated memory space or area.

Disclosures by Ando and Yokota are analogous because both references are related to system and method for recording data.

At the time of invention it would have been obvious to a person of ordinary skill in art to modify the recording method taught by Ando to include the repeating of determination of free or unallocated memory or storage space or area.

The motivation for using the method as taught by paragraph 7 of Yokota is to enable a user to erase content in a relatively easy and efficient manner.

Therefore, it would have been obvious to combine teaching of Ando with Yokota to obtain the invention as specified in the claim.

4. *In regard to claim 14 Ando teaches all limitations recited in claim 13 but does not expressly teach:* "wherein when an unallocated area satisfying a record request is not present among the at least one unallocated areas identified by the unallocated area identifying information, the holding section performs a search for unallocated areas in the information recording area and retains, in the memory, unallocated area identifying information for identifying at least one unallocated area found by the search."

Yokota teaches: "wherein when an unallocated area satisfying a record request is not present among the at least one unallocated areas identified by the unallocated area identifying information, the holding section performs a search for unallocated areas in the information recording area and retains, in the memory, unallocated area identifying information for identifying at least one unallocated area found by the search."

(e.g., see Paragraphs 468 and 472; Fig.29) *for repeating the search for free or unallocated memory space or area. The motivation for combining is based on the same rational given in rejection of claim 2.*

ALLOWABLE SUBJECT MATTER

Claims 3-4 are objected to as being dependent upon rejected based claims, but would be allowable if rewritten in correct and independent form including all of the limitations of the base claim and any intervening claims.

1. *The primary reason for allowance of claims 3-10 in instant application is the combination with the inclusion of the following limitations: (f) generating a pointer indicating a position based on an end position of an area in which the new file is recorded, wherein the search for unallocated areas in the information recording area in step (a) is performed in a fixed direction from a position following the position indicated by the pointer.*
2. *The primary reason for allowance of claim 11 in instant application is the combination with the inclusion of the following limitations: (i) generating a pointer indicating a random position in the information recording area, wherein the search for unallocated areas in the information recording area in step (a) is performed from a position following the position indicated by the pointer in a fixed direction.*
3. *The primary reason for allowance of claim 12 in instant application is the combination with the inclusion of the following limitations: wherein the search for unallocated areas in the information recording area in step (a) is performed from a start of the information recording area in a fixed direction.*

Conclusion

The prior art made of record and not relied upon are as follows:

1. U. S. Patent Publication No. 2001/0016841 A1 to Karasudani describes File system.
2. U. S. Patent Publication No. 2005/0219980 A1 to Kase et al. describes Data recording and reproducing apparatus, data recording and reproducing method and recording medium.
3. U. S. Patent Publication No. 2001/0037357 A1 to Anzal et al. describes Storage apparatus and access control method.

Any inquiry concerning this communication should be directed to Hashem Farrokh whose telephone number is (571) 272-4193. The examiner can normally be reached Monday-Friday from 8:00 AM to 5:00 PM.

If attempt to reach the above noted Examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Donald A Sparks, can be reached on (571) 272-4201. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

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*access to the Private PAIR system, contact the Electronic Business Center (EBS) at
866-217-9197 (toll-free).*

ASR

HF

2007-10-27


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